

A bi-directional communication system advantageously automatically senses and reports problems to a central operator network management station and operates with fewer subscriber service interruptions by detecting and correcting such
10 conditions before they result in subscriber service interruption. Specifically, a system adaptively varies upstream transmission power level to prevent communication interruption in a cable modem network. A method for adaptively adjusting communication operation by varying a transmission parameter involves retrieving a communication parameter from memory and comparing the retrieved parameter with a
15 predetermined threshold. A message is transmitted to a CATV head-end at a remote site representing that the parameter value indicates adjustment of the parameter is necessary.